Innovation for Our Energy Future



Join us the second Thursday of every month for a series of "brown bag" seminars, sponsored by the **National Renewable Energy Laboratory and** the U.S. Department of Energy (DOE). Each seminar is held at NREL's Washington, D.C., office with a videoconference link to Golden, Colorado. Topics focus on new and innovative renewable energy and energy analysis strategies, models, and technologies.





Web Access and **Call-In Information**

Log-In Info

URL for log-in:

https://www.mymeetings.com/nc/join/ Conference number: RH7863227 Passcode: LFENN

You also can join the event directly at https://www.mymeetings.com/nc/join. php?i=RH7863227&p=LFENN&t=c

Call-In Info

To call in: 1-888-677-8393 Passcode: LFENN

Zero Energy: Multiparametric Cost **Optimization**

A seminar presented by DOE/EERE's Office of Planning, Budget, and Analysis and NREL's Strategic Energy Analysis and Applications Center

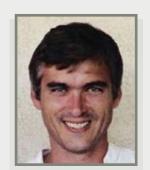
Andy Walker, Senior Engineer

National Renewable Energy Laboratory (NREL)

Thursday, August 9, 2007

noon-1 p.m. (videoconference in Washington, D.C.) 10-11 a.m. (Golden, Colo.)

(The seminar is also offered via conference call or Internet conferencing. See the log-in and call-in information below.)



Andy Walker

This seminar will address methods for determining the combination of renewable energy technologies that achieves "net zero" utility energy use for a facility, while minimizing life-cycle cost. Many organizations operate enough real property that it's affordable for them to take a "portfolio" approach and designate at least one of their facilities to demonstrate net-zero utility use. For example, a convenience food manufacturer, a major brewer, and the National Zoo have all asked the National Renewable Energy Laboratory (NREL) to help them with this goal in 2007. NREL's unique capabilities put it in a good position to provide this service. The method described in this seminar uses the lab's expertise in technology characterization, geographic information systems (GIS), and resource assessment. Andy Walker, of NREL, will discuss the appropriate values to use for technology characterization (\$/kW of capacity, O&M costs, efficiency of technologies, etc), status of GIS information available for use in the analysis, and various techniques used in the solver routine, including the capabilities of advanced solver engines.

Andy Walker is a senior engineer at the National Renewable Energy Laboratory (NREL), who supports the U.S. DOE Federal Energy Management Program (FEMP) Technical Assistance Task by conducting engineering and economic analysis of energy efficiency and renewable energy projects in federal buildings. He serves as chair of the American Society of Mechanical Engineers (ASME) Conservation and Solar Buildings Committee and has been an associate editor for the ASME Journal of Solar Energy Engineering. Walker's credentials include a B.S., M.S., and Ph.D. in mechanical engineering, and he is a registered professional engineer in the State of Colorado.

Golden, Colo., information

1617 Cole Blvd., Golden, Colorado **Building 15, Conference Room 375**

Please contact Lynne Fenn at lynne_fenn@nrel.gov or 303-384-7439

Washington, D.C., information

901 D Street SW (adjacent to the Forrestal Building) or 370 L'Enfant Promenade. Ninth Floor.

Please contact Wanda Addison, of Midwest Research Institute (MRI), at wanda_addison@nrel. gov or 202-646-5278